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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|------------------------|--------------------------|----------------------|---------------------|---------------------|
| 09/849,927 | 05/04/2001 | John E. Hudson | 476-1890.1 | 8948 |
| 7590 10/17/2005 | | | EXAMINER | |
| William M. Lee, Jr. | | | PATHAK, SUDHANSHU C | |
| Lee, Mann, Sm | ith, McWilliams, Sweeney | & Ohlson | | D + PED > H D + DED |
| P.O. Box 2786 | | | ART UNIT | PAPER NUMBER |
| Chicago, IL 60690-2786 | | | 2634 | |

DATE MAILED: 10/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action

| Application No. | Applicant(s) | |
|---------------------|-----------------|--|
| 09/849,927 | HUDSON, JOHN E. | |
| Examiner | Art Unit | |
| Sudhanshu C. Pathak | 2634 | |

Before the Filing of an Appeal Brief --The MAILING DATE of this communication appears on the cover sheet with the correspondence address --THE REPLY FILED September 25th, 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. 1. Me The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods: a) The period for reply expires 3 months from the mailing date of the final rejection. b) The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f). Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). NOTICE OF APPEAL 2. The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a). **AMENDMENTS** 3. 🔀 The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will <u>not</u> be entered because (a) They raise new issues that would require further consideration and/or search (see NOTE below): (b) They raise the issue of new matter (see NOTE below): (c) They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or (d) They present additional claims without canceling a corresponding number of finally rejected claims. NOTE: . (See 37 CFR 1.116 and 41.33(a)). 4. The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324). Applicant's reply has overcome the following rejection(s): See Attached Response to Arguements. 6. Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s). 7. 🛛 For purposes of appeal, the proposed amendment(s): a) 🖾 will not be entered, or b) 🗌 will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended. The status of the claim(s) is (or will be) as follows: Claim(s) allowed: Claim(s) objected to: Claim(s) rejected: 1-4,6-21 and 23-29. Claim(s) withdrawn from consideration: 5 & 22 (canceled). AFFIDAVIT OR OTHER EVIDENCE 8. The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e). 9. The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1). 10. The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached. REQUEST FOR RECONSIDERATION/OTHER 11. The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Attached Response to Arguements. 12. Note the attached Information Disclosure Statement(s), (PTO/SB/08 or PTO-1449) Paper No(s). 13. Other:

ATTACHMENT: INTERIEN SUMMARY PECORD

Application/Control Number: 09/849,927 Page 2

Art Unit: 2634

Response to Arguments

- Applicant's arguments with respect to claims 1-4, 6-21 & 23-29 filed on
 September 25th, 2005 have been fully considered but they are not persuasive.
 The applicant has stated that the examiner has not responded to the amendment filed on Feb. 18th, 2005 and has restated the arguments. The examiner disagrees and has explicitly provided an appropriate response below (Also see Interview Summary (PTO-413B)).
- 2. In regards to the Amendment on Feb. 18th, 2005:
 - The claims (Claim 1, 13, 17, 19 & 28-29 were amended by including the limitation "....receiving a data stream generated from a plurality of space time coded (STC) data streams received from a plurality of transmit antenna elements.....", this limitation is disclosed in the Applicant Admitted Prior Art (AAPA) on Page 2, lines 30-32 -to- Page 3, lines 1-8 (further referencing "Space Time Block Coded Transmit Antenna Diversity for WCDMA"; Dabak et al.; October 1998) and was included in the previous office action rejection.
 - In regards to the Figure 1, the figure has been accepted.
 - > I regards to the Abstract, the amended Abstract has been accepted.
 - In regards to the amendment to the claims responding to Claim objections (in the Non-Final rejection) have been accepted, however, the objection to Claim 27 is still maintained since the objection has not been overcome (Claim 27 is objected to in the Final Rejection).

Application/Control Number: 09/849,927

Art Unit: 2634

In regards to the discussion regarding the type of communication channel (dispersive or non-dispersive), this limitation has not been claimed. The rejections of the claims were based on the recited (claimed) limitations. Furthermore, as disclosed in the "Remarks" section of the amendment as dated above Page 12, second paragraph (beginning "In contrast, the present invention....."), states that the present invention comprises equalizing a data received over a dispersive communications channel. The AAPA discloses a dispersive communication channel (Specification, Page 7, lines 4-28). Furthermore the DiToro also discloses equalization over a dispersive channel (Column 1, lines 10-45).

Page 3

In regards to the argument that the examiner has not provided any reason to combine the examiner provides the motivation the Final rejection and restated "Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention that DiToro teaches an equalization process implemented in the frequency domain and this can be implemented in the receiver as described in the communication as described in the AAPA so as to accurately recover the transmitted signal in the receiver by minimizing the computational complexity of the equalization process." This motivation is provided in the DiToro reference in (Column 1, lines 60-68 & Column 2, lines 1-5), therefore it is no hindsight.

Application/Control Number: 09/849,927 Page 4

Art Unit: 2634

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sudhanshu C. Pathak whose telephone number is (571)-272-3038. The examiner can normally be reached on M-F: 9am-6pm.

- If attempts to reach the examiner by telephone are unsuccessful, the
 examiner's supervisor, Stephen Chin can be reached on (571)-272-3056
- The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.
- Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sudhanshu C. Pathak

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